CLINICAL LECTURE

ON

FACTS CONNECTED WITH THE DURATION AND DIAGNOSIS OF RHEUMATISM.

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WHAT is rheumatism? and what is the value of its statistics?

From the variabilities in our English climate, rheumatism is a disease of most frequent occurrence, and not only do instances continually arise in ordinary practice, but it is almost the exception to find any person who has arrived at years of maturity who has not at one period or other suffered from rheumatic pain. Still, it is beyond the reach of our present knowledge to say precisely what rheumatism is, or to indicate the changes which take place in the organic chemistry of the system during its attack. Some affirm that peculiar metamorphoses induce a disordered condition of the fibroid tissues of the body, and that in some persons these changes are more easily excited than in others, constituting a "rheumatic diathesis." Others advance a step further and assert, that the production of lactic acid by perverted nutritive changes constitutes the proximate cause of rheumatism. Dr. Prout suggested that this acid was the origin of the rheumatic symptoms, and Mr. Simon and Dr. Richardson have demonstrated that if introduced into the system, as by injection, it will produce symptoms of cardiac inflammation resembling rheumatic endo- and peri-carditis; and the presence of acid perspiration, the excess of uric and sulphuric acids in the urine, have seemed to favour such an hypothesis. But *one* symptom does not constitute rheumatism, for there is in this malady a disturbance of the whole organism, and not only the blood, and fibrous tissues, but the entire *nervous* system is involved in the morbid process.

It is not surprising that there is a remarkable difference in the severity and in the duration of rheumatism; and, in many instances, these peculiarities may be explained by constitutional complications. Both inherited and acquired morbid tendency thus greatly modify the course of rheumatic disease; one malady does not preclude the existence of another; these associations are often overlooked, they render an uniformity in treatment almost impossible, and they greatly *diminish the value of statistical returns*.

Some of these complications may be briefly dwelt upon, and they are of undoubted importance in everyday practice.

1. Rheumatism occurring in strumous subjects.
2. Rheumatism after syphilis, without ordinary periostitis.
3. Rheumatism with, or directly after, gonorrhœa.
4. Rheumatism in persons of intemperate habits.
5. Rheumatism in advanced life.
6. Rheumatism with miasmatic poisoning.
7. Rheumatism accompanying zymotic disease.

1. The occurrence of rheumatism with struma is by no means an unusual event. It is not only found amongst the poor, but even amongst those who are enabled to use every means of protection from exposure to cold, and from the inclemency of the weather. I might adduce many instances which have come under my care in the wards of Guy's Hospital. In some of these delicate patients, there is a greater tendency to persistent effusion into the joints; and in some patients organic disease of the larger joints is preceded by a true rheumatic attack; such cases are happily, however, rare. A short time since, a young man, on admission under my care at Guy's, was found to have effusion and commencing caries of the knee-joint, and it was considered as of a rheumatic character, for several other joints had been affected in a transient manner at the commencement of the acute symptoms. Again, it has appeared to me that rheumatic effusions into the pleura are more difficult of absorption in strumous subjects; and it is probable that acute cardiac affections run a more rapid course.

In directing the treatment of rheumatism, a strumous diathesis should receive special consideration. Violent measures are badly tolerated, and the convalescence is thereby greatly retarded, even if irreparable mischief is not induced. Strumous subjects are most unfavourable for any depletory measures; and we cannot too strongly express our sentiments in reference to the free use of mercurial medicines. We have seen acute pericarditis come on during salivation, followed by great irritability of the heart; and the convalescence of patients affected with rheumatism, who have been treated with mercurial medicines so as to affect the system, is, we believe, slow and tedious.

Another fact well worthy of consideration, in reference to the effect produced by preparations of mercury, is that, when the valves of the

heart have been thickened and contracted from old rheumatic disease, the relief arising from the increased activity of the abdominal glands by this medicine is often very marked; but, unless it be speedily withheld, the muscular fibre of the heart becomes enfeebled, and thereby dilatation is increased; and in some instances we have witnessed ulceration in an old damaged valve, which was possibly due to the same cause.

A favourite plan of treatment with some practitioners is the very free use of alkalis in acute rheumatism; but neither is this plan free from injurious effect, especially in strumous subjects. There are three conditions that we have thought attributable to, or, at least, greatly promoted by, this excessive administration of alkalis: 1, great anæmia; 2, excessive irritability of brain; and 3, irregular choreal movements. The alkalis, doubtless, enter the blood, and that perhaps more readily than any other medicine; and, when given in immoderate quantity, they change the blood constituents in a manifest degree. The second condition of functional irritability of the brain is, perhaps, due to a similar cause. We are well aware that all these states may be quite independent of these remedies; but we believe that these conditions may arise from the improper use of remedial agents.

We do not mean to affirm that alkalis, when given so as to produce more free action of the kidneys and other glands, are not of service, nor that a free mercurial purgative is not also beneficial; but to administer ounce after ounce of alkaline remedy to neutralise so much lithic acid or lactic acid, because the perspiration and the urine are unusually acid, is certainly neither physiological nor is its good result borne out by clinical experience.

Strumous subjects with rheumatism soon bear the preparations of steel with advantage, as the iodide of iron, the potash tartrate, etc.; and in some, especially chronic cases, cod-liver oil is of great value.

2. Periosteal disease is a common sequence of syphilis; and not only does the true periosteum become affected, but other fibroid tissues are implicated; pain is produced, and the patient is said to have rheumatism; but, besides this spurious rheumatism, persons who have been poisoned by syphilis are often the subjects of true rheumatic disease of the joints; the joints become red, swollen, and painful, and the malady presents all the characters of the simple ailment. We have, however, found that it subsides less easily, and is very apt to return on the slightest exposure to cold and wet.

In the treatment, alkalis are often of great value, especially the iodide of potassium; and, where there is diminished power, these alkaline remedies should be combined with quinine or with bark in one or other form.

3. Whilst some altogether deny the existence of gonorrhœal rheumatism, others regard it as a form of pyæmia; gonorrhœa is, unfortunately, so common a disease, that very many hospital patients are found with it; and in many instances only a short period elapses before the symptoms of rheumatism are developed, or they arise whilst the discharge continues. What, however, is the relation of the two ailments? Is their occurrence a mere coincidence? or does the pain in the joints arise from a poisoned condition of blood allied to suppurative fever? Instances have occurred in which acute suppurative articular disease of a fatal kind has happened, several joints being involved, for which no cause could be traced but the gonorrhœa then existent. Still, whilst numerous instances of gonorrhœa occur without any articular affection, or any recognisable disease of the blood, the following instance shews the manner in which the veins sometimes become involved. A patient, some years ago, was admitted under my care into Guy's Hospital for acute pneumonia on the right side. The symptoms were well marked; and, with saline treatment (bicarbonate of potash), he speedily convalesced, and was about to leave the hospital. Fatal symptoms, however, very unexpectedly came on; for, after a good night and partaking of his usual breakfast, even assisting to clear away the breakfast things, he told the nurse that he was faint; he sat down upon the edge of his bed, and in about half an hour he died. The lung was recovering, as we expected, and the pneumonic deposit in it had become nearly absorbed; but we found, what had previously not been ascertained, that he had recently suffered from acute gonorrhœa. The veins at the base of the bladder were filled with adherent fibrine, the iliac veins were in a similar state; and a clot separated from these veins had been carried to the right ventricle, and the action of the heart became so embarrassed as to cause speedy death. Rheumatism associated with gonorrhœa or gleet is, we believe, unusually persistent.

4. In persons of intemperate habits, whose vessels have become diseased and the viscera damaged, we have another cause for longer duration in an attack of rheumatism; but this obstinacy of character is still more manifest where—

5. The malady occurs at a period of life, when the vessels have become degenerated. Senile rheumatism has peculiarities, and one of them is greater persistency.

6. When persons who have resided in miasmatic districts become affected with rheumatism, there is a more marked periodicity in the symptoms: one day the skin being normal, the next clammy and perspiring, with rheumatic pains. We have witnessed, with enlarged spleen, sudden severe eruption on the skin, at first, in red blotches of roseola, and afterwards blebs, resembling rupia escharotica, shewing that there was, at least, peculiar cachexia, modifying the rheumatic affection.

7. Instances have been recorded, in which zymotic diseases, as typhus and typhoid, have been accompanied with rheumatism. I have never witnessed well marked instances of this kind; but there is nothing opposed to the known facts of disease, that an affection, having its origin in disordered metamorphic changes, should co-exist with one arising from animal poison, as typhus. It must, however, be remembered, that some cases of pyæmia closely resemble typhus fever. A few months ago, a woman was under my care in the hospital for chronic rheumatism. She slowly convalesced, and was about to return home partially relieved. In the next bed was a severe case of typhus, and the rheumatic patient became alarmed, the tongue became dry and brown, the pulse small and very compressible; there were no maculae, and the temperature was not much increased. It was feared that she might sink from exhaustion; stimulants were given freely; she rallied in a few days, and left the hospital. It was doubtful whether the symptoms arose from nervous alarm, or whether the contagion of typhus had anything to do with the sudden prostration. If, then, there be such complications, and others that might be mentioned, statistics, unless compiled with more than ordinary care, must be exceedingly deceptive and of comparatively little value.

Again, whilst there are many characteristics of true rheumatic disease, few maladies are more easily mistaken, and there is *no* sign which is *uniformly* present. Pain is, perhaps, the most constant indication, with stiffness of one or other joint; but rheumatic pericarditis may, and often does exist, without any pain whatever. The same may be said in reference to febrile symptoms, to increase of temperature, and to changes in the urine; none of these signs are pathognomonic.

Many maladies are designated rheumatic which have no connexion with that disease.

1. *Diseases of the spine* are often said to *commence* with an attack of rheumatism; but it will generally be found that the pain in the course of the nerves or in the fibrous tissues arises from direct implication of the nerves or of their centres.

2. The same remark applies to pain produced by the pressure of *cancerous*, *aneurismal*, or other tumours. Thus cancerous disease of the lumbar glands is often mistaken for lumbago; so also the pain from aneurismal disease of the thoracic and abdominal aorta, when no pulsating tumour can be detected, is referred to rheumatism.

3. During the course of *renal disease*, abnormal irritation arises not only in the serous membranes, producing pericarditis, pleurisy, peritonitis, etc., but a similar change happens with the synovial membranes, and a form of disease is induced which simulates rheumatism.

4. In chronic poisoning by *lead*, vague pains in the fascia, as well as in the joints, have been designated "saturnine arthralgia".

5. We have already referred to *periosteal disease* as a source of fallacy in the diagnosis of rheumatism.

6. *Shingles* or *herpes zoster* may be found in the course both of the cerebral and spinal nerves; and the severe pain which precedes the eruption of the vesicles, and which also follows their disappearance, closely simulates local rheumatism.

7. A more important disease, and one which is attended with fatal issue, is *pyæmia*. It closely resembles rheumatism; for, with rigor and febrile symptoms, there is fixed pain and swelling in the joints—first one, then another, being affected, though without subsidence of those parts first attacked. But, whilst there may be some similarity in the symptoms, the prognosis is widely different. The one is generally a curable disease; the other, a fatal one.

We might also refer to the severe pains in the back which precede some of the exanthems, as small-pox; and to the general *malaise* of fever; but these could scarcely be mistaken for rheumatism. And, lastly, the symptoms described as arising from acute *trichinosis* have some resemblance to rheumatism in the pain in the limbs. I have never seen an instance of a patient dying in consequence of this affection, although in numerous cases I have witnessed the trichina spiralis in the muscles after death.

It is an excellent rule, whenever there is local pain, to examine for a local cause; but it is often surprising to notice the strange maladies which are designated as rheumatic, at one part or other of their course, from the character of the pain; and, even when the disease is truly rheumatism, we attach but little value to statistics drawn up without reference to individual peculiarity. The natural result of this disregard of constitutional difference is to follow a routine plan in the remedies em-

ployed; in fact, treating the disease rather than the patient. We believe that rheumatism may be greatly relieved, or shortened in its course, by the proper use of means; and we strongly deprecate the treating of mere symptoms, as both injurious and unphysiological. But we would urge that each case be estimated in all its relations; and that a patient having severe rheumatism should not be at once dosed with calomel and opium, or with a certain number of drachms of saline medicine, irrespective of every other consideration.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

ON AN UNDESCRIBED VARIETY OF FRACTURE BY MUSCULAR ACTION.

By W. F. CLEVELAND, M.D., ETC.

THE following case was brought before the Harveian Society of London; and, on account of the supposed impossibility of the lesion, a Committee, consisting of Mr. Weeden Cooke and Dr. Hickman, was appointed to examine the patient.

W. P., aged 17, healthy-looking, with good muscular development, is a barman. He has never had syphilis. On March 2nd, 1868, just after starting to run a race, and in the act of attempting to pass his competitor, he felt something suddenly give way, or drop, as he termed it, near the groin. He was unable to walk, and was taken home in a cab. He remarked to his father, who was present at the time of the accident, that he felt a grating as of rough surfaces of bone at the seat of injury.

On the 4th, he presented himself as a patient at the Kilburn Dispensary. He limped into the room with his father's assistance; but, on attempting to walk alone, he was obliged to place the limb of the affected side in advance with his hands before he could take a step. On examination in conjunction with my friend Mr. G. E. Shuttleworth, we found some ecchymosis and swelling between the anterior superior and inferior spines of the left ilium; and, on grasping this portion of the bone with the finger and thumb of each hand, were surprised to find a piece, apparently about an inch or so in length, distinctly moveable, the movement producing a soft but decided crepitus. Again and again we moved this loose piece of bone, in order to be satisfied that we were not deceived by the crepitation of effusion resulting from a severe sprain. There had been no blow on the affected part, and the movements of the hip-joint were unimpaired.

He was ordered to keep in bed, with the thigh flexed on the pelvis and the leg straight, with the view of relaxing the rectus femoris muscle, the straight head of which, it was assumed, had been detached with the epiphysis which formed the inferior spinous process of the ilium, and in which, it may be remarked, complete union is said not to take place before the twenty-fifth year.

On March 12th, there was tenderness and considerable thickening over the seat of injury. Pain was produced on moving the limb. He could not raise the leg while lying on his back, except slowly and with difficulty. No crepitus could now be felt.

On March 30th, he had gradually improved since the last report, and had been able to take a fresh situation; but tenderness yet remained, and the thickening about the edge of the bone was still very marked.

On inquiry, it was found that, two months previously to the accident here recorded, he was seized, while running, with pain in the same spot; but, after a day's rest, it passed off, and left no weakness or other indication that he was aware of.

Report by Mr. Weeden Cooke and Dr. Hickman.—There is now distinct bony thickening extending from the anterior inferior spinous process of the left ilium an inch and a half upwards, being about half an inch in breadth. The question arises, Is this an old exostosis? or is it recent callus, the result of the injury described by Dr. Cleveland? There is no evidence of bone-disease prior to the injury; and, although the breaking away of the epiphysis at the anterior inferior spinous process by the violent action of the straight tendon of the rectus femoris is an event unrecorded, the evidence of crepitus afforded at the time of the injury, and the pain attending extension of the thigh, together with the bony deposit now perceptible, render the diagnosis given by Dr. Cleveland the most probable solution of the case.